Regulatory Information Conference 2001
Risk Informed Technical Specifications
Session W9

BWROG
RISK INFORMED TECHNICAL SPECIFICATION ACTIVITIES

JE “Dusty” Rhoads, PE
Principle Licensing Engineer
Vice Chairman BWROG Risk Informed TS Committee

Energy Northwest March 14, 2001

RISK INFORMED TECHNICAL SPECIFICATION (RITS)

- Use risk insights to better understand what should be the plants Tech Spec requirements and actions

- Though BWROG activities, use this understanding to enhance current Tech Specs to reflect the safety significance of the condition or requirement and thereby, where appropriate gain additional operating flexibility

Tasks Completed in 2000

- Initiative 1 (Modify TS Action end states)
  - Purpose: Modify Actions to stop at hot shutdown instead of cold shutdown
  - Action: Developed a BWR 4 generic multi-mode model with extension to other BWR reactor types
- Initiative 2 (Missed surveillance delay period from 24 hours up to next interval)
  - Purpose: Lead RI-TS on a industry wide level
  - Action: Use Individual plant models and M-Rule to determine if missed SR was risk significant and decide if extension up to next interval is appropriate

Tasks Completed in 2000

- Initiative 3 (Flexible mode restraints)
  - Purpose: Allow the plant to use the TS Action Completion Time to fix equipment problem and not restrain plant startup
  - Action: From generic multi-model insights, identified systems not generically amenable for inclusion
  - Action: Generically excluded equipment and systems would require plant specific justification for inclusion when applying for TS amendment

Remaining 2000 Actions

- Tasks to be completed in 2001 include:
  - Complete a report on how to develop a plant specific multi-mode model capability based on experienced gain in developing the Initiative 1 BWR 4 generic multi-mode model
  - “How to Report” will provide guidance to BWR plants in developing the ability to address plant specific elements in their TS change applications

2001 Plans

- Initiative 4 (Selective AOT extensions and Risk Informed AOTs with a Backstop)
  - 4a. (AOT extensions)
    - - BWR containment isolation valves
  - 4b. (Risk Informed AOTs with a backstop)
    - Develop a workable concept with a few examples
    - Concept would use existing AOT limits (front stop) or allow a configuration risk assessment to extend the AOT up to a specified backstop limit.
    - Define scope of LCOs that are amenable to a RI flexible AOT approach (Plant parameter and thermal limit LCOs may require a different approach) .

2001 Plans

- Initiative 5
  - 5a. Relocate Surveillance Requirements (SR) that don't demonstrate operability
    - Doesn't lend itself to a RI approach
    - Referred to the TSIC committee
  - 5b. Relocate ST Intervals & Optimize
    - The relocated STIs would be controlled under a TS program that would allow utilities to optimize the intervals
    - Developing a methodology for optimizing the surveillance test intervals using PRA techniques to augment existing guidance

Further Activities

- Initiative 6 (modify LCO 3.0.3)
  - Increase initial action from 1 hr up to 24 hours before starting plant shutdown
  - Defining Individual LCO or Generic LCO method
- Initiative 7 (TS “Functional” definition)
  - Condition which allowing additional AOT to correct is acceptable from a risk informed perspective
- Initiative 8 - (Relocate Non Risk Significant LCOs)
  - Provide a basis for removing TS LCOs that do not meet 10CFR50.36 criterion 4 based on improved risk insights

BWROG - RISK INFORMED TECHNICAL SPECIFICATION

- Use risk insights to better understand what should be the plant Tech Spec requirements and actions
- Though BWROG activities, use this understanding to enhance current Tech Specs to reflect the safety significance of the condition or requirement and thereby, where appropriate, gain additional operating flexibility